

California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

NOTICE OF PUBLIC HEARING

For
ORDER NO. R8-2004-0006
Amending Order No. R8-2003-0003, NPDES NO. CA8000402
For
Inland Empire Utilities Agency
Regional Water Recycling Plant No. 5
San Bernardino County

On the basis of preliminary staff review and application of lawful standards and regulations, the California Regional Water Quality Control Board, Santa Ana Region, proposes to amend waste discharge and producer/user water recycling requirements for Inland Empire Utilities Agency's Regional Water Recycling Plant No. 5.

The Board is seeking comments concerning the proposed amendment to waste discharge requirements. The Board will hold a public hearing to amend Order No. R8-2003-0003, NPDES No. CA8000402, waste discharge and producer/user water recycling requirements for RP-5 as follows:

DATE: January 22, 2004
TIME: 9:00 a.m.
PLACE: City of Loma Linda Council Chambers
25541 Barton Road
Loma Linda

Interested persons are invited to submit written comments on proposed Order No. R8-2004-0006. Interested persons are also invited to attend the public hearing and express their views on issues relating to the proposed Order. Oral statements will be heard, but should be brief to allow all interested persons time to be heard. For the accuracy of the record, all testimony (oral statements) should be submitted in writing.

Although all comments that are provided up to and during the public hearing on this matter will be considered, receipt of comments by January 5, 2004, would be appreciated so that they can be used in the formulation of the final draft Order that will be transmitted to the Board two weeks prior to the hearing. The final draft Order may contain changes resulting from comments received from the public. To view on/or download a copy of the final draft requirements, please access our website at www.swrcb.ca.gov/rwqcb8 on or after January 12, 2004.

The Board's proposed Order, related documents, and all comments and petitions received may be inspected and copied at the Regional Board office, 3737 Main Street, Suite 500, Riverside, CA 92501-3348 (phone 909-782-4130) by appointment scheduled between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday. Copies of the proposed Order will be mailed to interested persons upon request to Gary Stewart (909) 782-4379).

Any person who is physically handicapped and requires special accommodation to participate in this Regional Board Meeting should contact Barbara Laffoon at (909) 782-3285 no later than January 9, 2004.

Please bring the foregoing to the attention of any persons known to you who would be interested in this matter.

California Regional Water Quality Control Board
Santa Ana Region

January 22, 2004

ITEM:

SUBJECT: AMENDMENT TO ORDER NO. R8-2003-0003, NPDES NO. CA8000402,
WASTE DISCHARGE REQUIREMENTS FOR INLAND EMPIRE UTILITIES
AGENCY, REGIONAL PLANT NO. 5, SAN BERNARDINO COUNTY -
ORDER NO. R8-2004-0006

DISCUSSION:

On July 1, 2003, the Board adopted Order No. RB-2003-0003, NPDES No. CA8000402, establishing requirements for the discharge of wastes from the Inland Empire Utilities Agency's (IEUA) Regional Plant No. 5. Order No. R8-2003-0003 requires the discharge of waste and use of recycled water from the facility to be a "filtered and subsequently disinfected wastewater". The order defines these terms with numeric performance standards for turbidity and coliform organisms. The order further defines these terms with process design standards such as filter overflow rates, chlorine dose vs. contact time ration, and modal contact time. Both the performance standards and process design standards are based on the "Water Recycling Criteria" contained in Chapter 3, Division 4, Title 22 of the California Code of Regulations, established by the California Department of Health Services.

Although IEUA can comply with process design standards the majority of the time, they may not be able to achieve consistent compliance during high influent flows to the facility, such as during storm events. During these periods, however, there will also be significant flow in the receiving water that would dilute the waste discharge.

Board staff has consulted with the California Department of Health Services (CDHS) regarding the applicability of the process design standards for discharges of waste to flowing streams. CDHS has determined that although compliance with these standards is necessary to protect public health when recycled water is used, compliance with these standards is not necessary to protect public health for discharges into waterbodies that provide dilution of the wastewater, provided the performance standards (turbidity and coliform) are consistently met.

The proposed order adds a footnote to this requirement (footnote number 8) that reads as follows:

"Filter rates, CT, and modal contact time requirements are applicable only to the use of recycled water and not to surface water discharges, provided the receiving water provides a 1:1 dilution."

The proposed order also renumbers some of the existing footnotes. All other conditions and requirements of Order No. RB-2003-0003 will remain unchanged.

RECOMMENDATION:

Adopt Order No. R8-2004-0006 as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) - Doug Eberhardt
State Water Resources Control Board, Office of the Chief Counsel - Jorge Leon
State Water Resources Control Board, Division of Water Quality – Jim Maughan
State Department of Water Resources – Glendale
State Department of Health Services – Jeff Stone
State Department of Health Services – Richard Haberman
San Bernardino County Environmental Health Services - Mike Farrell
Orange County Coastkeeper - Garry Brown
Lawyers for Clean Water c/o San Francisco Baykeeper

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2004-0006

Amending Order No. R8-2003-0003, NPDES No. CA8000402
for
Inland Empire Utilities Agency
Regional Plant No. 5
San Bernardino County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Board), finds that:

1. On July 1, 2003, the Board adopted Order No. R8-2003-0003, NPDES No. CA8000402, establishing requirements for the discharge of wastes from the Inland Empire Utilities Agency's (hereinafter discharger) Regional Plant No. 5.
2. Order No. R8-2003-0003 requires the discharge of waste and use of recycled water from the facility to be a "filtered and subsequently disinfected wastewater". The order defines these terms with numeric performance standards for turbidity and coliform organisms. The order further defines these terms with process design standards such as filter overflow rates, chlorine dose vs. contact time ration, and modal contact time. Both the performance standards and process design standards are based on the "Water Recycling Criteria" contained in Chapter 3, Division 4, Title 22 of the California Code of Regulations, established by the California Department of Health Services (CDHS).
3. The Board has consulted with the CDHS regarding the applicability of the process design standards for discharges of waste to flowing streams. CDHS has determined that although compliance with these standards is necessary to protect public health when recycled water is used, compliance with these standards is not necessary to protect public health for discharges into waterbodies that provide dilution of the wastewater, provided the performance standards are consistently met.
4. Although the discharger can comply with process design standards the majority of the time, the discharger may not be able to achieve consistent compliance during high influent flows to the facility, such as during storm events. During these periods, there will also be significant flow in the receiving water.
5. Order No. R8-2003-0003 needs to be amended to relieve the discharger of complying with the process design standards during periods when the receiving water can provide dilution of the wastewater discharge.
6. In accordance with Water Code Section 13389, the amendment of Order No. R8-2003-0003 is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.
7. The Board has notified the discharger and other interested agencies and persons of its intent to amend waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. R8-2003-0003 be amended as follows:

1. Discharge Specification A. 2 shall be replaced with the following:
 2. The discharge of wastewater or use of recycled water shall at all times be a filtered and subsequently disinfected wastewater that meets the following criteria:
 - a. Filtered wastewater means an oxidized wastewater that meets either (1) or (2), below:
 - (1) Has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:
 - (a) At a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or does not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters, based on peak dry weather design flow⁸; and
 - (b) The turbidity of the filtered wastewater does not exceed any of the following:
 - i. An average of 2 Nephelometric Turbidity Unit (NTU) within a 24-hour period;
 - ii. 5 NTU more than 5 percent of the time within a 24-hour period; and
 - iii. 10 NTU at any time⁹.

⁸ Filter rates, CT, and modal contact time requirements are applicable only to the use of recycled water and not to surface water discharges, provided the receiving water provides a 1:1 dilution.

⁹ See Section G.7., "Compliance Determination."

- (2) Has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:
 - (a) 0.2 NTU more than 5 percent of the time within a 24-hour period; and
 - (b) 0.5 NTU at any time.
- b. Disinfected tertiary wastewater shall mean a filtered wastewater that has been disinfected and meets the following criteria:
 - (1) The filtered wastewater has been disinfected by either:
 - (a) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes¹⁰, based on peak dry weather design flow¹⁰; or
 - (b) A disinfection process that, when combined with the filtration process, demonstrates inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS-2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.
 - (2) The average weekly concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters. The average weekly concentration shall be evaluated using the median of the bacteriological results of the last seven days¹¹.
 - (3) The number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any calendar month.
 - (4) The number of total coliform bacteria shall not exceed an MPN of 240 per 100 milliliters in any sample.
- c. A coagulated wastewater shall be an oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream from a filter by the addition of suitable floc-forming chemicals.

¹⁰ "Peak Dry Weather Flow" means the arithmetic mean of the maximum peak flow rates sustained over some period of time (for example three hours) during the maximum 24-hour dry weather period. Dry weather period is defined as period of little or no rainfall.

¹¹ See Section G.8., "Compliance Determination."

- d. An oxidized wastewater shall be wastewater in which the organic matter has been stabilized, is non-putrescible, and contains dissolved oxygen.
2. All other conditions and requirements of Order No. R8-2003-0003 shall remain unchanged.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on January 22, 2004.

Gerard J. Thibeault
Executive Officer